

Applicant : Eric Rose, et al.
Serial No.: 10/646,493
Filed : August 21, 2003
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In the Specification:

Please replace the paragraph that appears on page 1, lines 5-10 with the following amended paragraph:

This application is a continuation of United States ~~Application~~ Serial No. 09/053,872, filed April 1, 1998, now abandoned, which is a continuation-in-part of PCT International Application No. PCT/US97/08282, filed May 15, 1997 which is a continuation-in-part of United States ~~Application~~ Serial No. 08/648,561, filed May 16, 1996, now U.S. Patent No. 5,839,443, issued November 24, 1998, the contents of each of which are incorporated by reference in their entireties into the present application

Please replace the paragraph that appears on page 6, lines 15-35 and page 7, line 1 with the following amended paragraph:

This invention further provides that the patient may be subjected to extracorporeal blood circulation during transplant surgery or cardiopulmonary bypass surgery or any surgery in which obligate clamping of a blood vessel is required. The patient may be subjected to extracorporeal blood circulation during any kind of cardiac surgery, including bypass grafting, valve replacement, ~~congenital~~ congenital repair heart surgery and heart transplantation. The patient may be a human being. The patient may also be subjected to extracorporeal life support. The patient may be a cardiogenic shock patient. The patient may be undergoing

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hemodialysis, continuous arterio-venus hemofiltration (CAVH), continuous venovenous hemofiltration (CVVH), extracorporeal circulatory membrane oxygenation (ECMO), brain surgery, vascular surgery, abdominal surgery, orthopaedic surgery, hip replacement surgery, transplant surgery, or any surgery requiring cardio-pulmonary bypass. The subject may be any patient requiring a mechanical circulatory assistance or ventricle assist device (i.e. LVAD). The subject may be a patient requiring new devices as described in Wickelgren, 1996 such as implantable defibrillators. The subject may also be a patient suffering with symptoms of systemic lupus erythematosus or TTP (thrombotic thrombocytopenic purpura). The subject may also be a patient requiring plasmapheresis.

Please replace the paragraph that appears on page 13, lines 16-35 and page 14, lines 1-4 with the following amended paragraph:

- 1) Oligonucleotides for producing Factor IX_{mi} (Ser365→Xxx).

3'-W ACA GTT CCT CTA XXX CCC CCT GGG GTA V-5' (SEQ ID NO:1)

where

W is T, 3'-GT or 3'-AGT

V is C, 3'-CA or 3'-CAA

XXX is the complement to a DNA codon for any one of the standard amino acids other than serine.

- 2) Oligonucleotides for producing FACTOR IX_{mi}

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(Asp269→Yyy)

3'-W TTC ATG TTA GTA YYY TAA CGC GAA GAC V-5' (SEQ ID
NO:2)

where

W is A, 3'[[=]]-TA, or 3'-TTA

V is C, 3'-CT, or 3'-CTT

YYY is the complement to a DNA codon for any one of
the standard amino acids other than aspartic acid
and cysteine.

3) Oligonucleotides for producing Factor IXmi

(His221→Zzz)

3'-W TTA CAT TGA CGA CGG ZZZ ACA CAA CTT TGA CCA V-
5' (SEQ ID NO:3)

where

W is A, 3'-AA, or 3'-TAA

V is C, 3'-CC, or 3'-CCA

ZZZ is the complement to a DNA codon for any one of
the standard amino acids other than histidine and
cysteine.

After the drawings, please add the Sequence Listing attached
hereto as **Exhibit B**.